Processes for licensing and work plans

Commissioned for the Earth Resources Regulation – Continuous Improvement Project

Rivers Economic Consulting

The need for and processes around licencing and work plans

What are earth resources?

The earth resources sector in Victoria includes mining, extractive, petroleum¹ and geothermal industries², as summarised in Chart 1 below:

Chart 1: Earth resources sector in Victoria



Why are earth resource activities important and what are the risks?

The importance of the earth resources sector for Victoria is highlighted in the following section of the second reading speech for the Mineral Resources (Sustainable Development) Amendment Bill 2013³:



Moreover, R&D and commercialisation of State-owned earth resources through exploration and mining activities may give rise to other benefits to the Victorian community more broadly.⁴ For example, geoscience information collected through mineral exploration activities may provide broader public benefits including identifying adequate supplies of clean water, civil engineering projects, land use planning, environmental impact assessment, public health and safety, and national sovereignty.⁵

However, earth resources industries have the *potential* to impose negative 'third-party effects' in relation to *public safety, community disturbance* and the *environment*, on those who are not directly involved in these industries⁶. These potential negative effects create an additional rational for the ongoing regulation of the industries.⁷ These potential impacts are highlighted in more detail in Chart 2.

Chart 2: Negative third-party effects of earth resources industries⁸



Indeed, it has been noted by PwC⁹ that:

"the public...put their trust in regulators to keep the sector accountable. Regulatory scrutiny continues to rise and becomes standardized globally. Only policy savvy operators will prosper, those who recognise the need for sustainable development and who understand the need for mutual outcomes."

What are the main legislative Acts key objectives around the earth resources sector?

In Victoria, minerals and extractives are regulated under the *Mineral Resources (Sustainable Development) Act 1990* (MRSDA), whilst petroleum plus geothermal industries are regulated under the *Petroleum Act 1998 (on shore)* and the *Offshore¹⁰ Petroleum and Greenhouse Gas Storage Act 2010,* and *Geothermal Energy Resources Act 2005.* Considering the need to promote the earth resources sector in a way that is compatible with the economic, social and environmental goals of the state – the objectives of these Acts can be summarised as shown in Chart 3.

Chart 3: Main Acts for the earth resources sector and summary of objectives

MRSDA:

- 1. To encourage and facilitate exploration for minerals and foster the
- establishment and continuation of mining operations;
- 2. To establish a legal framework where:
- mineral and stone resources are developed in a way which minimises adverse impacts on the environment and the community;
- consultation and dispute resolution mechanisms are effective with appropriate access to information;
- land which is mined or where stone has been extracted is rehabilitated;
- compensation is paid for the use of private land for exploration or mining;
- conditions in licences and approvals are enforced; and
- the health and safety of the public is protected in relation to work being done under a licence; and

3. To recognise that the exploration for, and mining or extraction of, mineral resources and stone must be carried out in a way that is not inconsistent with the Native Title Act 1993 and the Lands Titles Validation Act 1994.

Petroleum Act 1998 (On shore petroleum)

1. To encourage the exploration for petroleum in Victoria and to promote petroleum production for the benefit of all Victorians;

- 2. To have regard to economic, social and environmental interests by ensuring:
 the efficient exploration for, and production of, petroleum;
- that the impacts on individuals, public safety, public amenity and the environment as a result of petroleum activities will be minimised as far as is practicable;
- · that land affected by petroleum activities is rehabilitated;
- that there will be just compensation for access to, and the use of, land; and
 that petroleum explorers and producers will comply with all authority
 conditions that apply to them.

Geothermal Energy Resources Act 2005

- 1. To encourage the exploration for geothermal energy in Victoria and to promote geothermal energy extraction for the benefit of all Victorians by—
- promoting sustainable, commercial exploration for and extraction of geothermal energy resources and geothermal energy (GER and GE);
- establishing that the Crown owns and may seek to gain a return for use of GER and GE;
- establishing secure title and efficient and effective allocation processes to encourage the exploration for, and extraction of GER and GE;
- establishing transparent, fair and efficient land use and environment planning and land access processes for the exploration for, and extraction of, GER and GE; and
- ensuring that public health and safety and environmental issues are considered in planning for, authorising, operating and decommissioning geothermal energy operations.

Offshore Petroleum and Greenhouse Gas Storage Act 2010

- 1. Provide an effective regulatory framework for:
- petroleum exploration and recovery; and
- the injection and storage of greenhouse gas substances in the Victorian offshore area.

The primary instruments by which the objectives of the MRSDA are fulfilled are mining licences, work plans and work authorities.¹¹

What does the move to a risk-based approach mean for the mineral and extractive industries?

Both Victoria's Economic Development and Infrastructure Committee (EDIC) 2012 inquiry into greenfields mineral exploration and project development and the 2014 Hazelwood mine-fire inquiry recommended a move to a *risk-based* work plan model. The key risk-based provisions around work plans in the MRSDA were introduced in early 2014. In December 2015, the *Mineral Resources (Sustainable Development) (Mineral Industries)* and *Mineral Resources (Sustainable Development) (Mineral Industries)* and *Mineral Resources (Sustainable Development) (Extractive Industries)* regulations¹² moved from a very prescriptive list of inputs to an *outcomes focused approach* in terms of the risk management objectives the regulator is trying to achieve.

The focus of the risk-based model is now on assessments which bring together a consideration of:

- any serious consequences of mine or quarry site operations in the context of location;
- risk receptors (e.g. housing, roads, other community assets); and
- measures to mitigate risk.

- in a revised work plan approach.

Moreover, in the past whenever something changed at the mine or quarry site (e.g. a maintenance bay was moved or the colour of a roof was changed) then this would have triggered the need for a work plan variation. From December 2015, work plan variations are triggered when there is a new significant risk or change to operations. The Secretary has the ability to direct a work plan variation where circumstances deem that there is an 'unacceptable risk'.

What is the purpose of licences and conditions?

Under the MRSDA, a mining tenement refers to *a claim, lease, mining, exploration, retention or prospecting licence*.¹³ Operators holding a tenement (including a licence) issued under the MRSDA must comply with a range of legislative requirements relating to: operating conditions; work plans; expenditure requirements; statutory returns; rent; royalty; rehabilitation bond; and codes of practice.¹⁴ The *purpose* of 'granting' mineral resource licences under the MRSDA include providing for:

- 1. a means through which ownership of minerals is transferred from the State when removed¹⁵;
- 2. certainty for the miner as to its rights over a deposit¹⁶; and
- 3. maintaining standards¹⁷ which reduce the risk of activities for public safety, the environment and community disturbance as discussed earlier.

The 'grant' of specific types of mineral licences (see Table 1), allows for mineral resource activities including: prospecting, exploration, mining or activities incidental to mining; or to retain the rights to a mineral resource that might become economically viable to mine in future. In addition to mineral resources licences, the holder of a *miner's right* and *tourist fossicking authority* (as provided by the

MRSDA) is also allowed to search for and keep any minerals found, subject to the consent of the land owner and the licensee, where one exists.¹⁸

Type of licence	Term	Renewal	Prospecting (5 hectares or less)	Exploration	Mining or activities incidental to mining	Retain the rights to a mineral resource
Exploration licence	5 years	5 years		\checkmark		
Prospecting licence	Up to 5 years	No renewal	\checkmark	\checkmark	\checkmark	
Retention licence	Up to 10 years	2 renewals		\checkmark		\checkmark
Mining licence	Up to 20 years	Case-by-case consideration		√*	\checkmark	

*The Minister may authorise the mining licence holder with the ability to undertake *exploration only* for a specified period of 2 years.

Mineral licences are *subject to conditions* imposed by the Minister, including but not limited to the rehabilitation of the land, protection of the environment, protection of groundwater, the work to be undertaken, expenditure by the licensee, reporting requirements, payment of certain fees, bonds and levies and royalties, access requirements and the protection of community facilities.²⁰ Licence conditions indicate 'what' the licence holder *must do* to maintain compliance and relate closely to the need to reduce the risk of harm and damage to the community and environment.

What is the purpose of industry consents and extractive industry work authorities (EIWAs) and conditions?

With regards to extractives activities, proponents need to obtain (are 'granted') either an *extractive industry consent* or an *extractive industry work authority* (EIWA), providing 'final permission' to undertake activities, as shown in Chart 4. As with licences, EIWAs are subject to a set of *general and activity based conditions*²¹ which designate 'what' the authority holder must comply with for the purpose of reducing the potential risks arising from extractive industry activities, as summarised in Chart 2.

Chart 4: Main tenements and conditions for the extractive industries

Extractive Industry Work Authority (EIWA): final permission to undertake extractives activities if the proposed quarry has an area equal to or more than one hectare and a depth equal to or more than two metres (with the term specified at the time of the grant).

Extractive Industry Consent: to search for stone on Crown land; land controlled by an authority under the Water Act 1989; licensee under the Water Industry Act 1994 or the manager of a public highway road or street

General conditions: working in accordance with the approved work plan; insurance; boundaries; public safety; fire risk management; providing designated parking areas for employees and visitors; establishing and maintaining a register and non-compliance/environment incident notification.

Activity based conditions: ground disturbance; topsoil management; erosion drainage and discharge controls; water dams; vegetation management and buffer zones; noxious weeds and pests; dust emissions; noise emissions; visual amenity; heritage sites; hazardous material management; slope stability; internal roads; removal of derelict and redundant plant; rehabilitation of disturbed land; and working hours.

What are the main steps in the mineral resource application process?

As shown in Chart 5, before a proponent can commence most mineral resource activities they must go through two main steps including firstly, obtaining a *licence* (**the grant process**) and secondly, obtaining approval for a lodged work plan (**the approval process**) and other requirements met (see Chart 5). The approved work plan gives the licence holder '*final permission*' to undertake mineral exploration or mining work. The work plan needs to demonstrate 'how and where' the activity will take place and how it will address various concerns and risks around public safety, community disturbance and the environment.

Chart 5: Mineral resource application process



As part of obtaining a licence, a *program of work* as required by the *Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2013*²² for a mineral licence and will depend on the type of licence sought and summarised in Chart 6.

Chart 6: 'Program of work' information required by licence application type

Exploration licence (program of work)

The nature of the program proposed (office-based activities, on-ground exploration activities, subsurface evaluation activities);

As far as practicable, an indication of the location and focus of the proposed exercises with location maps;

A description of the nature of targets that the program seeks to delineate;

A description of the geological rationale behind the proposed program (including area selection, target identification, target testing and resource delineation.

Retention licence (program of work)

Mineral resource assessment

- Technical and economic studies related to:
 - the development of the mineral resource in accordance with the principles of sustainable development;
- demonstrating the economic viability of the mineral resource:

A proposed timing schedule for the work program including key milestones and proposed expenditure against each milestone; and

Demonstration that the planned scale of mining is commensurate with the efficient development of the mineral resource with consideration to its size.

Mining licence (program of work)

Reflect a clear intention to establish a mine; and provid a time schedule for and details of proposed work, which may include:

- further geological evaluation required to convert indicated
- resources or reserves
 preparation of a full
- feasibility study;formal decision to
- proceed to mining;
- project financing; obtaining of approvals,
- consents and land access agreements;
- preparation of detailed mine design;
- construction;
- commissioning; and
- treatment.

Prospecting licence (program of work)

Map of the location of the proposed works in relation to the boundaries of the land included in the application

A brief description of the proposed type of works including:

 the proposed type of operation (e.g. alluvial, shallow excavation) and
 type of treatment (e.g. gravity, heap leach, vat Applications for exploration and prospecting licences are granted or refused within 90 days from the date of acceptance of the application and retention and mining licences are granted or refused within 120 days from the date of acceptance of the application (subject to all required information be supplied).²³

What are the main steps in the extractive resource application process?

A proponent wishing to engage in extraction activities must lodge a work plan (if it is determined by ERR that one is needed) along with a fee²⁴ and have that work plan approved (Step 1 **the approval process**), and possess the appropriate extractive industry work authority (EIWA)²⁵ (Step 2 **the grant process**) before they can commence activities, as shown in Chart 7. The work authority gives the holder 'final permission' to undertake extractives work. The information requirements for extractive industry work plans (EIWPs) and extractive industry authorities (EIWAs) are stipulated under the MRSDA and *Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2013*.

Chart 7: The extractive resource application process

Step 1: Lodge a work plan with application fee for approval including planning approval and meeting other requirements including rehabilitation bond, evidence of public liability insurance, consents/compensation agreements for land access on private land or restricted Crown land, and other necessary consents and approvals. Step 2: Obtain a work authority: 'final permission' to undertake extractives work by having an approved work plan and meeting other requirements around geological information; general location, regional and site plans; processing methods, stability requirements for declared quarries; environmental management program; rehabilitation plan, community facilities affected; and community engagement plan.

Begin activity

Work plans are not required (i.e. Step 1 can be avoided) where the extractives activity is to be carried out on land that has an area of less than five hectares and a depth of less than five metres; and does not require blasting or the clearing of native vegetation²⁶. If a work plan is not required, the site must comply with the *Code of Practice for Small Quarries*²⁷ which sets out the minimum mandatory requirements that work authority holders must meet and provides practical guidance about how small quarries should meet regulatory requirements and environmental standards. The detailed processes involved in granting a licence or extractive industry work authority, renewals, and variations are illustrated in Charts A1.1 to A1.4 in Appendix 1.

Mineral licensees and EIWA applicants must also lodge a rehabilitation bond/bank guarantee prior to work commencing to ensure that rehabilitation is undertaken if the event that the licence/authorisation holder does not meet their rehabilitation obligations²⁸.

What is the purpose of work plans?

Work authorities for mineral licences and EIWAs require proponents to lodge a work plan for approval. As discussed earlier, the work plan represents an *outcomes focused approach* in terms of the risk management objectives the regulator is trying to achieve. The work plan identifies 'how' proponents will undertake their mineral resource or extractive resource activities. With respect to mining or extractive industries, work plans are either classified on the basis of being *Low Impact*²⁹; *Code of Practice*³⁰; *Statutory*; *Non-statutory*; or *Environmental Effects Statement (EES)*.

Information required in work plans is specified by *Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2013* under schedules 15 to 18 and are summarised in Chart 8. Where the work program submitted as part of the prospecting licence application satisfies all the requirements of Schedule 16 and the proposed work is not on agricultural land; the proponent can have the work program approved as the work plan under section 40(2AA) of the MRSDA.³¹ Extractive industry work plans require the following information including geological information; general location, regional and site plans; processing methods, stability requirements for declared quarries; environmental management program; rehabilitation plan, community facilities affected; and community engagement plan.

The detailed processes involved in approving work plans and work plan variations are illustrated in Charts A2.1 to A2.5 in Appendix 2.

Chart 8: 'Work plan' information required by licence type held

Exploration licence (Work plan)

A description of the proposed works, including details of the potential environmental impacts and the measures proposed for their control or mitigation.

If specific sites have been identified for drilling or other earthworks, a map showing the general location of those works, including any details regarding the cutting of tracks or roads.

A description of the proposed rehabilitation of any areas subject to surface disturbance including revegetation proposals and where relevant, proposals for the removal of plant and equipment.

A description of the proposed arrangements for consultation with landowners, Crown land managers and local councils.

Information about the proposed methods of monitoring, auditing and reporting impacts on the environment.

Retention licence (Work plan)

A description of the proposed works, including details of the potential environmental impacts and the measures proposed for their control or mitigation.

If specific sites have been identified for drilling or other earthworks, a map showing the general location of those works, including any details regarding the cutting of tracks or roads.

A description of the proposed rehabilitation of any areas subject to surface disturbance including revegetation proposals and where relevant, proposals for the removal of plant and equipment.

A description of the proposed arrangements for consultation with landowners, Crown land managers and local councils.

Information about the proposed methods of monitoring, auditing and reporting impacts on the environment.

Mining licence (Work plan)

A general description of geological information including, if available, estimates of ore resources and reserves.

A general location plan at scale of 1:100 000 or 1:50 000. A regional plan at scale of 1:25 000. A site plan at 1:1000, 1:2500 or other appropriate scale.

A description of the metallurgical and mineral recovery methods to be used.

A rehabilitation pla

An environmental management plan.

A description of any significant community facilities that may be affected by the proposed works.

A community engagement

Prospecting licence (Work plan)

A general description of any test work undertaken in the licence area.

A general location plan at scale of 1:100 000, 1:50 000 or 1:25 000. If not already provided in the general location plan, a regional plan at scale of 1:25 000.

A plan of the licence area at an appropriate scale.

A description of proposed mineral recovery methods.

A description of rehabilitation proposals.

A description of any significant community facilities that may be affected by the proposed works.

A community engagement plan.

When and why do work plans need statutory endorsement?

Part of the work plan approval process for mining and extractive activities involves obtaining a planning permit under the *Planning and Environment Act 1987* from local council unless an Environment Effects Statement (EES) is deemed necessary under the *Environment Effects Act 1978* as determined by the Minister where:

• there is a likelihood of regionally or state significant adverse effects on the environment;

- there is a need for integrated assessment of potential environmental effects (including economic and social effects) of a project and relevant alternatives; and
- normal statutory processes would not provide a sufficiently comprehensive, integrated and transparent assessment³².

Where a planning permit is required and in the case of mining/prospecting or extractive work plans/work plan variations – *statutory endorsement* of work plans is required³³ and applications for statutory endorsement³⁴ must be responded to by ERR within one month. The statutory endorsement is intended to *give weight* to the administrative process of endorsing work plans for subsequent planning permit applications *to remove duplication and delays* associated with duplicate referrals to agencies during the planning permit application process.³⁵

Where are the potential delays to processing grants and approvals for mineral and extractive resources with regards to external agencies?

Major delays in processing licences and work authority grants³⁶ and approvals³⁷ where sent to referral agencies *external to DEDJTR* are shown in Chart 9.

Chart 9: Delays to processing of grants and approvals by external referral agencies

Delays – processing grants

- Up to five months delay in the instance of coal before applications are accepted;
- Three to six month typical delay where Crown land has been identified and the application has been sent to fulfil native title requirements and the applicant must enter an ILUA or TOSA agreement (some have been in the grant process for three years); and
- Up to 2 months delay driven by the need to have mineralisation reports assessed by Geological Survey Victoria (GSV).

Delays - processing approvals

- Four to six month delay where planning permits are required from local municipal councils with respect to mining exploration and mining project and extractive industries activities classified as 'Code of Practice'.
- Four to six-month average delay where the application has to be sent to external referral agencies for comments and review.
- Major delay where licensees object to refusal of endorsement or proposed conditions and lodge a claim with VCAT against the decision made.
- Major delays of one to two years in processing approvals for work plans and variations for mining projects and extractive industries at an average cost of \$2m where and EES is required, with DELWP running this process through a Technical Reference Group.

What are/is the purpose of petroleum and geothermal energy tenements granted in Victoria?

The 'grant' of specific types of petroleum and geothermal licences, leases, permits and authorities, allows the holder to undertake a specific set of petroleum resource and geothermal energy resource activities under their respective Acts, as summarised in Chart 10. Victoria has recently banned all onshore unconventional gas exploration. The *Resources Amendment Legislation (Fracking Ban) Act 2017* which came into operation on 16 March 2017, amends the:

- MRSDA by preventing the exploration for and mining of coal seam gas; and
- the *Petroleum Act 1998* by imposing a moratorium on any petroleum exploration and petroleum production in the onshore areas of Victoria until 30 June 2020, preventing the Minister from granting an exploration permit, a retention lease or a production licence during the moratorium period.³⁸

However, DEDJTR continues to assess and consider approving applications for the suspension of conditions and associated extension of petroleum and geothermal authorities (i.e. variations)³⁹. These tenements allow the regulator to meet the objectives of the relevant Acts as summarised in Chart 2 earlier.



Chart 10: Petroleum and geothermal energy resource tenements and respective Acts

The rights/allowable activities provided by the various tenements are illustrated in Table 2.

Type of tenement	Term	Rights given	
Onshore petroleum exploration permit (moratorium until 2020)	5 years with 5-year renewal.	Explore for petroleum resources within the permit area.	
Onshore petroleum retention lease ⁴¹ (moratorium until 2020)	up to 15 years and cannot be renewed.	Retain exclusive rights to a petroleum discovery, if the petroleum resource is not currently commercially viable to develop, but might become viable within 15 years.	
Onshore petroleum production licence ⁴² (moratorium until 2020)	for the duration that the petroleum is produced from the ground.	Produce and explore for petroleum within the licence area.	
Onshore petroleum special drilling authorisation ⁴³	Unspecified	Drill a well within the drilling authority area but not exclusive rights to any petroleum found.	
Special Access authority	Up to 1 year with 1-year extension.	Carry out petroleum exploration but does not include the right to drill a well, or rights to petroleum in the area.	
Offshore petroleum exploration permit	6 years with 5-year renewals provided a reduction in area in accordance to halving rules.	Explore for petroleum resources within the permit area.	
Offshore petroleum retention lease	Up to 5 years and can be renewed.	Retain exclusive rights if they discover petroleum if the petroleum resource is not currently commercially viable to develop, but might become viable within 15 years.	
Offshore petroleum production licence ⁴⁴	For the duration that the petroleum is produced.	Produce and explore for petroleum within the licence area.	
Offshore petroleum pipeline licence	Granted indefinitely.	Construct a pipeline in the offshore area specified in the licence used to transport petroleum.	
Greenhouse gas sequestration exploration permit	5 years with 5-year renewal.	Explore for greenhouse gas storage formations within the designated permit area.	
Greenhouse gas injection licence	for the duration that greenhouse gas is injected into	Inject and permanently store greenhouse gas substances within the licence area specified.	

Table 2: Main petroleum and geothermal energy resource tenements⁴⁰

Type of tenement Term		Rights given		
	the storage formation.			
Geothermal exploration	Up to 15 years and can be	Explore for geothermal energy within the permit area		
permit	renewed once for up to 5 years.	Explore for geothermal energy within the permit area.		

With regards to offshore petroleum resources the National Offshore Petroleum Titles Administrator (NOPTA) administers petroleum titles and resource management for offshore Commonwealth waters under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*.⁴⁵ DEDJTR administers titles, well integrity and environment within state waters located within 35.56km of the Victorian coast under the Victorian *Offshore Petroleum and Greenhouse Gas Storage Act 2010*.⁴⁶ The detailed processing steps involved in NOPTA referrals is summarised in Chart A3.3 in Appendix 3.

What are the main steps in the petroleum and geothermal energy resources application process?

The application process for petroleum and geothermal energy resources (similar to mining tenements) involves a two-step process including the **grant process** (with the submission of approved program of work) and the work authority process (which requires approval of relevant production; storage development⁴⁷; operation + environmental management + well operations⁴⁸; environment; field development or rate of recovery plans⁴⁹ - **the approval process**) as shown in Chart 11. These plans represent the assessment of environment, resource and safety management issues.



The detailed processes involved in granting tenements; the approval of various plans and plan variations are illustrated in Charts A3.1 to A3.4 in Appendix 3.

Appendix 1: Licences and work authorities – grant processes



Chart A1.1: MRSDA licences and extractive industry work authorities - grant process

Chart A1.2: MRSDA licence and extractive industry work authority variations (renewals, transfers and refusal of renewals) – grant process



Chart A1.3: MRSDA Licence variation (cancellation) and extractive industry work authority variations (devolution of interest) – grant process



Chart A1.4: Other MRSDA Licence and extractive industry work authority variations - grant process

MRSDA Licence and Work Authority variations (licence area change and conditions change, licence creation of interest, licence agreement, licence partial cancellation, licence full surrender + Work Authority area change and conditions change) – grant process



Appendix 2: MRSDA work plans – approval processes



Chart A2.1: Mineral exploration and mining projects (low impact) - work plan approval process

Chart A2.2: Mineral exploration and mining projects, and extractive industries (code of practice) – work plan approval process



Chart A2.3: Mineral exploration – work plan approval process



Statutory time frame for MRSDA work plans and variations begin when a number of things happen (see sections 40(4)(a)(b)(c)(d)(e) and (f) and 41(3) (a)(b)(c)(d)(e) and (f) of the MRSDA)

Chart A2.4: Mining projects and extractive industries - work plan approval process (Statutory work plan)



Chart A2.5: Mining projects and extractive industries – work plan approval process (Non-statutory work plan or work plan with EES)



Appendix 3: Petroleum and geothermal energy resources – grants and approval processes

Chart A3.1: OPGGSA licences and permits – grant process



Chart A3.2: *Petroleum Act 1998*, OPGGSA and *Geothermal Energy Resources Act 2006* licence permit and lease variations – grant process



Chart A3.3: OPGGSA and *Geothermal Energy Resources Act 2005* Acreage release and OPGGSA NOPTA referrals – grant process



Chart A3.4: OPGGSA and Petroleum Act 1998 – approval processes

OPGGSA Environmental Plan (EP), Field Development Plan (FDP) and variations and Rate of Recovery (ROR) + Petroleum Act Petroleum Production Development Plan (PPDP), Storage Development Plan (SDP), Operations Plan Chap 1 (OP1), Environmental Management Plan Chap 2 (EMP2) and Well Operation Management Plan Chap 3 (WOMP3)–approval process



⁴ Proposed Mineral Resources (Sustainable Development) (Extractive Industries) Amendment Regulations 2014 (Fees) Regulatory Impact Statement Victorian Department of State Development, Business and Innovation, March 2014.

⁵ Duke, J M, (2010), *Government geoscience to support mineral exploration: public policy rationale and impact*, Prepared for Prospectors and Developers Association of Canada cited in Proposed Mineral Resources (Sustainable Development) (Extractive Industries) Amendment Regulations 2014 (Fees) Regulatory Impact Statement Victorian Department of State Development, Business and Innovation, March 2014.

⁶ Proposed Mineral Resources (Sustainable Development) (Extractive Industries) Amendment Regulations 2014 (Fees), Regulatory Impact Statement Victorian Department of State Development, Business and Innovation, March 2014.

⁷ Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2013, Regulatory Impact Statement Victorian Department of State Development, Business and Innovation 19 August 2013, Deloitte Access Economics.

⁸ Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2013, Regulatory Impact Statement
 Victorian Department of State Development, Business and Innovation 19 August 2013, Deloitte Access Economics.

⁹ We need to talk: About the future of mining: PwC future in sight series, 2017.

¹⁰ Victorian offshore area is defined as coastal waters consisting of the first 3 nautical miles seaward of the Territorial Sea Baseline (see Section 5, Part I of the *Offshore Petroleum and Greenhouse Gas Storage Act 2010*)

¹¹ http://report.hazelwoodinquiry.vic.gov.au/part-three-fire-risk-management/regulation-fire-risk-hazelwood-mine/regulatory-regime.html

¹² Essentially based on OH&S regulations around general duty and being prescriptive only where needed

¹³ http://earthresources.vic.gov.au/earth-resources-regulation/about-us/rram-

terms?SQ_DESIGN_NAME=mobile&SQ_ACTION=set_design_name (accessed 14 October 2017).

¹⁴ http://earthresources.vic.gov.au/earth-resources-regulation/licensing-and-approvals/sand-stone-and-clay/work-authority-compliance/tenement-compliance (accessed 7 October 2017).

¹⁵ Mineral Resources Amendment (Sustainable Development) Bill Page 2758 28 July 2010 Assembly Second reading.

¹⁶ An Overview of the Australian Legal Framework for Mining Projects in Australia, Chambers & Company International Lawyers (October 2013).

¹⁷ http://www.tecsolaustralia.com.au/What-to-know-about-Mining-Tenements-bgp2999.html (accessed 6 October 2017).
 ¹⁸ Proposed Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2013 Regulatory Impact

Statement Department of State Development, Business and Innovation 19 August 2013.

 $^{19}\,Source:\,http://earthresources.vic.gov.au/earth-resources-regulation/about-us/rram-interval of the second state of the$

terms?SQ_DESIGN_NAME=mobile&SQ_ACTION=set_design_name (accessed 14 October 2017); and Proposed Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2013 Regulatory Impact Statement Department of State Development, Business and Innovation 19 August 2013.

²⁰ Proposed Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2013 Regulatory Impact Statement Department of State Development, Business and Innovation 19 August 2013.

²¹ https://www.goldenplains.vic.gov.au/sites/default/files/P17-

120%20WA1497%20Work%20Plan%20Specific%20Conditions.pdf (accessed 10 October 2017).

²² See Schedules 2, 3, 4 and 5.

²³ Mineral Resources (Sustainable Development) Amendment Bill 2013 Page 3677 30 October 2013 ASSEMBLY Second Reading

²⁴ Fee will depend on size of intended quarry, proximity to sensitive locations and whether operations involve blasting and whether the work plan will require a planning permit (statutory endorsement (SE)) or Environment Effects Statement (EES) (see Mineral Resources (Sustainable Development) (Extractives Industries) Amendment Regulations 2014 (Fees), Regulatory Impact Statement Victorian Department of State Development, Business and Innovation March 2014, Deloitte Access Economics.

²⁵ Compensation on the value of the stone is negotiated between the two parties during the application process where stone on private land not owned by the applicant of a work authority

²⁶ http://earthresources.vic.gov.au/earth-resources-regulation/licensing-and-approvals/sand-stone-and-clay/approval-requirements (accessed 7 October 2017).

²⁷ See section 77G(2) of the MRSDA.

²⁸ See MRSDA Section 80.

²⁹ In the case of low impact exploration, a licensee is not required to have an approved work plan to commence activities.
³⁰ Extractives activities carried out on land that has an area of less than five hectares and a depth of less than five metres; and does not require blasting or the clearing of native vegetation do not require a work plan.

¹ Defined in Victoria as any naturally occurring hydrocarbon or a mixture of hydrocarbons whether they are in a liquid, solid or gaseous state and a mixture of non-hydrocarbon gas such as carbon dioxide, hydrogen sulphide, nitrogen or helium and *not including coal and coal seam gas*.

² University of Melbourne, Victorian Geothermal Assessment Report 2016

³ Mineral Resources (Sustainable Development) Amendment Bill 2013 Page 3677 30 October 2013 ASSEMBLY Second Reading Speech.

³¹ http://earthresources.vic.gov.au/earth-resources-regulation/licensing-and-approvals/minerals/approval-to-do-workwith-a-licence/work-plan-and-planning-consent (accessed 8 October 2017).

³³ http://earthresources.vic.gov.au/earth-resources-regulation/licensing-and-approvals/minerals/approval-to-do-workwith-a-licence/statutory-endorsement-of-work-plans (accessed 10 October 2017).

³⁴ Statutory recognition to the previous administrative practice of 'work plan endorsement' from 1 February 2012.

³⁵ http://earthresources.vic.gov.au/earth-resources-regulation/licensing-and-approvals/minerals/approval-to-do-workwith-a-licence/statutory-endorsement-of-work-plans (accessed 10 October 2017).

³⁶ See Chart A1.1 in Appendix 1.

³⁷ See Charts A2.2, A2.4 and A2.5 in Appendix 1.

³⁸ http://onshoregas.vic.gov.au/ (accessed 4 October 2017).

³⁹ http://earthresources.vic.gov.au/earth-resources-regulation/licensing-and-approvals/department-reports/current-earth-resources-tenements.

⁴⁰ http://earthresources.vic.gov.au/earth-resources-regulation/licensing-and-approvals/licensing-glossary#petauth (accessed 15 October 2017).

⁴¹ Only exploration permit holders can apply for a retention lease within the permit area after discovering petroleum.

⁴² Only an exploration permit or retention lease holder can apply for a production licence.

⁴³ Only the holder of an onshore exploration permit, onshore retention lease, onshore production licence, offshore petroleum exploration permit, offshore retention lease or offshore production licence holder can apply for a special drilling authorisation adjacent to its other title.

⁴⁴ Only an exploration permit or retention lease holder can apply for a production licence.

⁴⁵ http://earthresources.vic.gov.au/earth-resources-regulation/licensing-and-approvals/petroleum/offshore (accessed 5 October 2017).

⁴⁶ http://earthresources.vic.gov.au/earth-resources-regulation/licensing-and-approvals/petroleum/offshore (accessed 5 October 2017).

⁴⁷ http://earthresources.vic.gov.au/__data/assets/image/0010/1127899/Overview-Petroleum-Tenement-Process-fig1.gif (accesses 15 October 2017).

⁴⁸ http://earthresources.vic.gov.au/__data/assets/image/0010/1127899/Overview-Petroleum-Tenement-Process-fig1.gif (accesses 15 October 2017).

⁴⁹ http://earthresources.vic.gov.au/earth-resources-regulation/licensing-and-approvals/petroleum/environment-plans (accessed 15 October 2017).

³² Economic Development and Infrastructure Committee Inquiry into greenfields mineral exploration and project development in Victoria May 2012.